



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4074D
 UNIQUE ID NUMBER: 3PW063
 COMBUSTOR:
 ENGINE TYPE: TF

BYPASS RATIO: 6.7
 PRESSURE RATIO (π_{00}): 31.8
 RATED THRUST (F_{00}) (kN): 333.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	8.9	47.9	69.5	4.4
AS % OF ORIGINAL LIMIT	45.4	40.6	67.1	25.9
AS % OF CAEP/2 LIMIT (NO _x)			83.9	
AS % OF CAEP/4 LIMIT (NO _x)			98.6	
AS % OF CAEP/6 LIMIT (NO _x)			111.2	
AS % OF CAEP/8 LIMIT (NO _x)			129.6	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.949	0.03	0.23	42.35	
CLIMB OUT	85	2.2	2.416	0.05	0.25	34.48	
APPROACH	30	4.0	0.810	0.08	0.64	11.88	
IDLE	7	26.0	0.239	5.07	34.34	3.81	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1010	1926	13036	19971	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.8	39.1	59.9	3.4
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.1-101.6
TEMPERATURE (K)	292.8-302.6
ABS HUMIDITY (kg/kg)	0.0097-0.0112

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 15/06/1996-16/06/1996

REMARKS

1. Data from Report PWA-6678

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)